

**Equivalents**

Those skilled in the art will recognize, or be able to ascertain using no more than routine experimentation, many equivalents to the specific embodiments of the invention described herein. Such equivalents are intended to be encompassed by the following claims.

What is claimed is:

1. An isolated nucleic acid molecule comprising a nucleic acid sequence encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, or SEQ ID NO:16.

5           2. The isolated nucleic acid molecule of claim 1, wherein the polypeptide consists of the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, or SEQ ID NO:16.

10           3. An isolated nucleic acid molecule comprising a nucleic acid sequence encoding a polypeptide comprising at least 25 contiguous amino acids of the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, or SEQ ID NO:16.

15           4. The isolated nucleic acid molecule of claim 3, wherein the polypeptide comprises at least 50 contiguous amino acids of the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, or SEQ ID NO:16.

20           5. An isolated nucleic acid molecule comprising at least 50 contiguous nucleotides of the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:15, or SEQ ID NO:17.

25           6. The nucleic acid molecule of claim 5, wherein the nucleic acid molecule comprises at least 100 contiguous nucleotides of the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:15, or SEQ ID NO:17.

            7. The nucleic acid molecule of claim 5, wherein the nucleic acid molecule comprises the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:15, or SEQ ID NO:17.

30           8. An isolated nucleic acid molecule comprising a nucleic acid sequence encoding a fusion protein containing at least one pyrin domain, nucleotide binding site

(NBS) domain, or leucine rich repeat domain of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16.

9. An isolated nucleic acid molecule that hybridizes to a nucleic acid molecule consisting of the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:15, or SEQ ID NO:17 under conditions of incubation at 45°C in 6.0X SSC followed by washing in 0.2X SSC/0.1% SDS at 65°C.

10. The isolated nucleic acid molecule of claim 1, further comprising vector nucleic acid sequences.

11. A host cell containing the nucleic acid molecule of claim 1.

12. An isolated polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16.

13. The isolated polypeptide of claim 12, wherein the polypeptide consists of the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16.

14. An isolated polypeptide comprising at least 25 contiguous amino acids of the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16.

15. The isolated polypeptide of claim 14, wherein the polypeptide comprises at least 50 contiguous amino acids of the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16.

16. A fusion protein containing at least one pyrin domain, NBS domain, or LRR domain of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16.

17. An antibody which selectively binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16.

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18. A method for producing a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16, the method comprising culturing the host cell of claim 11 under conditions in which the polypeptide is expressed.

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19. A method for detecting the presence of a polypeptide in a sample, the method comprising:

(a) contacting the sample with a compound that selectively binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6,

15 SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16; and

(b) determining whether the compound binds to a polypeptide in the sample.

20. A kit comprising a compound that selectively binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16 and instructions for use.

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21. A method for detecting the presence of a nucleic acid molecule in a sample, the method comprising:

(a) contacting the sample with a nucleic acid probe or primer which selectively hybridizes to the nucleic acid molecule of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:15, or SEQ ID NO:17; and

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(b) determining whether the nucleic acid probe or primer binds to a nucleic acid molecule in the sample.

22. A method for identifying a compound that binds to a polypeptide, the method comprising the steps of:

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(a) contacting a cell or a sample comprising a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16 with a test compound; and

(b) determining whether the polypeptide binds to the test compound.

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23. A method for identifying a compound that modulates the activity of a polypeptide, the method comprising:

(a) contacting a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16 with a test compound; and

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(b) determining the effect of the test compound on the activity of the polypeptide to thereby identify a compound which modulates the activity of the polypeptide.

24. A method for modulating the activity of a polypeptide, the method comprising contacting a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16 or a cell expressing the polypeptide with a compound that binds to the polypeptide in a sufficient concentration to modulate the activity of the polypeptide.

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